

Appellants submit that the remarks provided in the Appeal Brief with respect to separate patentability of Groups I and II also apply to the above-corrected groups. As Appellants have provided remarks explaining why they believe that Group I (claims 1, 9-10, 12, 15-16, 18 and 20), directed to compositions for enhancing the arc-tracking and arc-erosion resistance properties of an article, and Group II (claims 2-8, 11, 13-14, 17, 19 and 21), directed to methods of enhancing the arc-tracking and arc-erosion resistance properties of an article, are separately patentable, Appellants submit that their grouping of claims satisfies the requirements of 37 C.F.R. §1.192(c)(7).

III. Grounds of Rejection

On pages 2-5 of the Examiner's Answer, the Examiner addresses the various outstanding grounds of rejection. In response, Appellants provide the following remarks.

A. Rejection of Claims 1-21 under §103(a) over Takita

The Examiner asserts that the only difference between the presently claimed composition and that of Takita is that the composition in Examples 1 and 2 of Takita are cured by means of a peroxide catalyst instead of a hydrosilyl group constituent. The Examiner further asserts that because Takita discloses at column 4-5 that conventional curing means can include curing with hydrosilyl group-containing siloxanes, it would have been obvious to cure the compositions of Takita by adding a hydrosilyl group-containing compound instead of using a peroxide catalyst. Additionally, the Examiner asserts that claims 11, 17, 19 and 21 would have been obvious over Takita because Takita discloses forming articles solely from a silicone rubber composition. The Examiner also asserts that the phrase "of enhancing the arc-tracking and arc-erosion resistance properties of an article" in the preamble of claims 11, 17, 19 and 21 does not distinguish these claims from Takita.

Appellants respectfully disagree with the above positions. First, with respect to the

claimed compositions, Appellants submit that it would not have been obvious to modify the composition of Takita by using a reactive component containing one or several SiH groups, as used in the presently claimed invention, in conjunction with the peroxide catalyst used in Takita. In particular, Appellants submit that the peroxide catalyst of Takita cannot be used together with the SiH group-containing component of the presently claimed invention. For instance, the peroxide catalyst of Takita, under temperature, generates free radicals that permit hydrogen atoms to be extracted from alkyl groups. See, for example, Chemistry and Technology of Silicones, by Walter Knoll, in particular the attached pages 229 - 231. In stark contrast, the composition of the presently claimed invention requires a reagent that uses a catalyst other than a peroxide catalyst. That is, the presently claimed invention requires a catalyst capable of facilitating a polyaddition reaction ($\text{SiH} + \text{Si-alkenyl}$) such as, for example, a platinum catalyst, so that the SiH group-containing component can react with a component containing one or several Si-alkenyl groups. See, for example, page 5 of the specification, which states "...the platinum constituent advantageously corresponds to the catalytic platinum normally used for carrying out the polyaddition reactions responsible for crosslinking these compositions." Thus, Appellants submit that it would not have been obvious to react the SiH group-containing component of the present invention together with the peroxide catalyst of Takita to arrive at the composition of the presently claimed invention.

In addition to the above difference, Appellants wish to point out another significant difference between the presently claimed composition and the composition of Takita. In particular, Appellants recognize that the composition of Takita necessarily includes a component (5) that comprises a particular azo-organic compound in the form of 2, 2'-azobis (2-methyl butyronitrile). See Takita at column 4, lines 8-18. In stark contrast, mixtures A B and C, as defined in claim 1, preclude the addition of such an azo-organic compound.

Furthermore, in addition to the above differences, nowhere does Takita disclose or even suggest the possibility of using a hydrosilyl group-containing siloxane to cure the disclosed composition to obtain the surprising and unexpected advantages of the presently

claimed composition. That is, as explained in Appellants' Appeal Brief, Takita fails to disclose or even suggest that one should, or even could, modify the disclosed composition to achieve the superior properties of the presently claimed invention demonstrated, for example, in Tables I and II at page 2 of the specification. In this regard, Appellants wish to point out that courts have held that a compound and its properties are inseparable when determining nonobviousness. See *In re Papesch*, 315 F.2d 381, 137 U.S.P.Q. 43 (C.C.P.A. 1963). That is, in addition to the above structural differences, unexpected activity in one of a spectrum of properties (i.e., unexpected arc-resistance properties) can suffice to show patentability. See *In re Chupp*, 816 F.2d 643, 2 U.S.P.Q.2d 1437 (Fed. Cir. 1987).

Finally, with respect to method claims 11, 17, 19 and 21, Appellants submit that the phrase "of enhancing the arc-tracking and arc-erosion resistance properties of an article" in the preamble does, in fact, distinguish the claimed methods from Takita. That is, as each of the subject claims include the words "an effective amount," Appellants submit that it is clear that the amount of the composition being referred to in these claims is an amount effective to achieve the enhancement of arc-tracking and arc-erosion resistance properties, as set forth in the preamble of these claims.

In this regard, Appellants note that courts have established that when the preamble gives "life and meaning" to the invention, then its limitations do limit the scope of the claim. See *Locite Corp. v. Ultraseal Ltd.*, 781 F.2d at 866, 228 U.S.P.Q. at 92; *Perkin-Elmer Corp. v. Computervision Corp.*, 732 F.2d 888, 896, 221 U.S.P.Q. 669, 675 (Fed. Cir. 1984). Furthermore, courts have found claim preambles to be limiting when "the introductory phrase was deemed essential to point out the invention defined by the claim..." See *Kropa v. Robie*, 187 F.2d 150, 88 U.S.P.Q. 478, 481 (C.C.P.A. 1951). As the phrase "an effective amount" in the body of claims 11, 17, 19 and 21 clearly relies on the words "of enhancing the arc-tracking and arc-erosion resistance properties" in the preamble of these claims, Appellants submit that the preamble is clearly essential to point out the invention defined by these claims and, thus, gives "life and meaning" to the

invention.

Additionally, Appellants note that courts have held the preamble of a claim to be limiting when the claim expressly incorporates language of the preamble into the body of the claim. See, for example, *CFMT, Inc. v. Yieldup International Corp.*, 92 F. Supp. 2d 359 (D. Del. 2000). In the present application, claims 11, 17, 19 and 21 all incorporate the language "an article" in the preamble into the body of the claim ("said article"). Thus, Appellants submit that the preamble language of these claims should also be considered limiting under this line of reasoning.

For at least all the above reasons, as well as those set forth in Appellants' Brief on Appeal, Appellants respectfully submit that the composition and methods of the presently claimed invention are substantially different from the invention of Takita. In view of Takita's failure to disclose or suggest the claimed composition or methods or the surprising and unexpected properties they provide, Appellants submit that Takita fails to render obvious Appellants invention. Accordingly, the rejection of claims 1-21 under 35 U.S.C. §103(a) over Takita should be withdrawn.

B. Rejection of Claims 1-21 over JP '644 in view of Matsushita

The Examiner asserts that while JP '644 fails to disclose curing the disclosed self-extinguishing silicone rubber compositions with a hydrosilyl containing compound instead of a peroxide catalyst, Matsushita discloses at column 4 to column 5 that organo hydrogen polysiloxanes are conventionally used to cure silicone rubber compositions. The Examiner further asserts that it would have been obvious to cure the composition of JP '644 with a hydrosilyl group-containing siloxane instead of using the disclosed peroxide catalyst. Additionally, Appellants note that the Examiner has asserted that method claims 11, 17, 19 and 21 would have been obvious of JP '644 in view of Matsushita because JP '644 discloses the possibility of preparing an article from the disclosed silicone rubber composition.

Appellants respectfully disagree with these positions. In particular, with respect to the rejection of the presently claimed composition over JP '644 in view of Matsushita Appellants again submit that it is improper to combine these references to arrive at the presently claimed invention. That is, as set forth in explicit detail in Appellants Brief, Appellants believe that the Examiner has failed to establish a *prima facie* case of obviousness under §103(a). More specifically, Appellants submit that neither JP '644 nor Matsushita provide the requisite motivation for combining the references to arrive at the presently claimed invention. In this regard, Appellants wish to point out that there must be "some objective teaching in the prior art or...knowledge generally available to one of ordinary skill in the art ... to lead that individual to combine the relevant teachings of the references." See *In re Fine*, 837 F.2d 1071, 1074, 5 U.S.P.Q.2d 1596, 1598 (Fed. Cir. 1988). As previously stated, Appellants do not believe that evidence of such an objective teaching or general knowledge has been provided.

In fact, as Appellants have repeatedly pointed out, there is an explicit teaching away from combining JP '644 and Matsushita in the manner that the Examiner suggests. That is, Matsushita at column 1, lines 27-30 and 46-52 explicitly states that it is undesirable to combine these references. Specifically, Matsushita teaches that substitution of the iron oxide disclosed in JP '644 would produce a composition that would exhibit "unsatisfactory" properties. More specifically, Matsushita discloses that in order to avoid obtaining such an undesirable composition, the composition must include a γ -type iron oxide instead of the $(\text{FeO})_x(\text{Fe}_2\text{O}_3)_y$ iron oxide of JP '644. See Matsushita at column 3, lines 16-40, which states that the γ -type iron oxide is "an essential component ... to the compositions of the invention." (Emphasis added).

In view of the above teachings of Matsushita, Appellants submit that it is completely unreasonable to assume that one of ordinary skill in the art would have looked to the teachings of these references and combined them to arrive at the presently claimed invention in spite of the explicit teaching therein against doing so. The Examiner "must show reasons that the skilled artisan, confronted with the same problems as the inventor

and with no knowledge of the claimed invention, would select the elements from the cited prior art references for combination in the manner claimed." See *In re Rouffet*, 149 F.3d 1350, 1357-58, 47 U.S.P.Q.2d 1453, 1458 (Fed. Cir. 1998).

Absent any evidence in these references to suggest that some positive advantage would result from ignoring the explicit teaching away from the asserted combination, Appellants submit that one can only conclude that the Examiner has engaged in improper hindsight reconstruction in asserting that it would have been obvious to combine these references to arrive at the presently claimed. In particular, as the references only provide an explicit teaching away from the asserted combination, Appellants submit that the only motivation for combining these references comes from Appellant's own disclosure. That is, Appellants believe that the only reason the Examiner has chosen to reject the presently claimed invention over the asserted combination is that Examiner is now aware of the advantages achieved by Appellants' invention. However, the teaching, suggestion or motivation for combining the cited references "cannot come from the Appellants invention itself." See *In re Qetiker* 977 F.2d 1443, 24 USPQ 2d 1443 (Fed. Cir. 1992).

Furthermore, Appellants do not even believe that these references are properly combinable. That is, Appellants believe that JP '644 precludes the possibility of adding SiH groups as foreseen in Matsushita.

Additionally, Applicants note that the Examiner has relied on *In re Gurley*, 27 F.3d 551, 31 U.S.P.Q.2d 1130 (Fed. Cir. 1994) to support her rejection of the presently claimed invention over JP '644 in view of Matsushita. See Advisory Action mailed January 9, 2002, at page 3 and Examiner's Answer mailed June 4, 2002, at page 7. Appellants respectfully submit that it is improper to rely on *In re Gurley* to support this rejection. In particular, *In re Gurley* states that a known or obvious material does not become patentable simply because the art described it as somewhat inferior." (Emphasis added). *In re Gurley* 27 F.3d at 553, 31 U.S.P.Q.2d at 1132. However, Matsushita goes far beyond stating that the iron oxide of JP '644 is "somewhat inferior." Instead, Matsushita states at col. 3, lines 18-19 that the disclosed γ -type iron oxide is "essential." Thus, Matsushita does not merely

state that the iron oxide of JP '644 is "somewhat inferior," but in fact states that it is entirely unsuitable.

In addition Appellants submit that neither JP '644 or Matsushita, alone or in combination, recognize the unexpected and surprising advantages of the presently claimed invention. That is, Appellants submit that there is no appreciation in either JP '644 or Matsushita of the unexpected and surprising arc-resistance properties obtained by the presently claimed composition and methods.

Finally, with respect to the method claims, Appellants again wish to point out that, for all of the reasons set forth above, the words "of enhancing the arc-tracking and arc-erosion resistance properties of an article," in the preamble of these claims constitute limitations that distinguish these claims from the cited references. That is, as these words are clearly "essential to point out the invention defined by the claim," Appellants submit that they must be considered when evaluating the nonobviousness of the claim.

Accordingly, as neither JP '644 nor Matsushita discloses or suggests incorporating "an effective amount" of the claimed composition into an article for the purpose "of enhancing the arc-tracking and arc-erosion resistance properties of an article," Appellants submit that the method claims 11, 17, 19 and 21 would not have been obvious over JP '644 in view of Matsushita.

In view of the above, Appellants respectfully submit that the composition of claims 1, 16, 18 and 20 and the methods of using these compositions to enhance arc-resistance properties as set forth in claims 11, 17, 19 and 21 are substantially different from those of JP '644 in view of Matsushita. In view of these substantial differences and the above-noted indicia of non-obviousness, Appellants submit that the claimed invention would not have been obvious the above references. Accordingly, Appellants submit that the rejection of the claims under 35 U.S.C. §103(a) over JP '644 in view of Matsushita should be withdrawn.

IV. Conclusion

In view of the foregoing, Appellants respectfully submit that the claimed invention would not have been obvious at the time the invention was made to a person having ordinary skill in the art. Accordingly, reversal of the Examiner's outstanding rejections are earnestly solicited.

Two extra copies of this Reply Brief are being filed herewith. No fee is believed to be due, however, the Commissioner is authorized to charge any fees that may be required by this paper, and to credit any overpayment, to Deposit Account No. 02-4800.

Respectfully submitted,

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